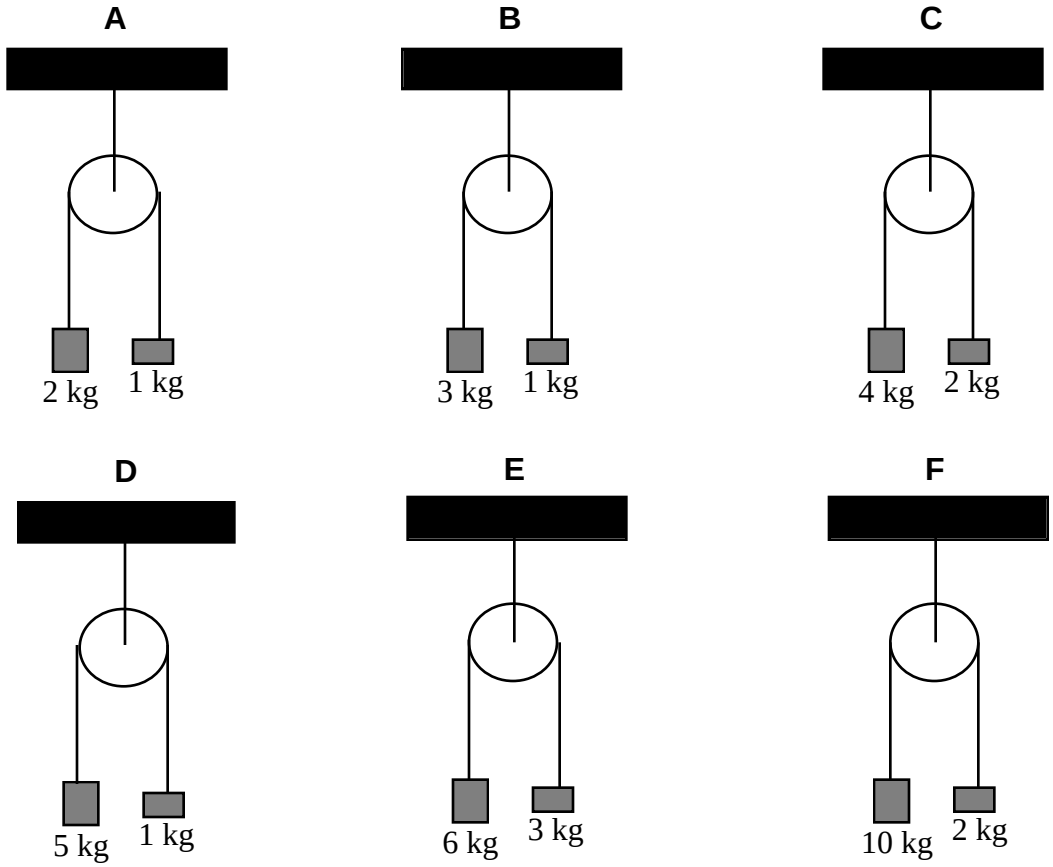
Two Different Blocks and a Pulley—Net Force [28]

Each figure below shows two blocks hanging from the ends of a strong but massless string, which passes over a frictionless pulley. In each figure, the block on the left is more massive than the block on the right, so the block on the left accelerates down, and the block on the right accelerates up. The mass of each block is given in the figures.

Rank the figures from greatest to least on the basis of the net force that accelerates the system of blocks.



Greatest 1_____ 2_____ 3_____ 4_____ 5_____ 6_____ Least

Or, all of the net forces will be the same (but not zero). ___

Or, the net force is zero for all of these. ____

Please carefully explain your reasoning.

How sure were you of your ranking? (circle one)

Basically Guessed				Sure				Very Sure	
1	2	3	4	5	6	7	8	9	10

[28] S. Loucks